A METHOD FOR EFFICIENT USE OF A TRANSMIT ENGINE

ABSTRACT OF THE DISCLOSURE

A method for providing efficient use of a transmit engine in transmitting packet directing information. In one embodiment, two linked lists are used to submit packets and packet directing information to a transmit engine. When there is no packet to send, both lists are marked as free. When software desires to send a packet to hardware, the packet is placed on the first linked list. Software marks the first linked list as busy. If the transmit engine is not busy with the second linked list, software will start the transmit engine utilizing the first linked list. While the first linked list is marked as busy, all additional packets are directed to the second linked list. When the packets of the first linked list have been sent, software marks the first linked list as free. The second linked list is then marked as busy and the transmit engine begins transmitting the packets of the second linked list. While the second linked list is marked as busy, all additional packets are directed to the first linked list. The present invention provides for the efficient use of a transmit engine by not requiring the software to stall the transmit engine to place packets onto the linked list. The transmit engine can work on one linked list and the software can load packets onto another linked list simultaneously without effecting the performance of either action.